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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,030	05/31/2001	David Henry	SP00-189	8153
22928	7590	10/01/2003	EXAMINER	
CORNING INCORPORATED			PENG, KUO LIANG	
SP-TI-3-1			ART UNIT	
CORNING, NY 14831			PAPER NUMBER	
			1712	

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/871,030

Applicant(s)

HENRY ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/31/01 IDS.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☒ Claim(s) 1-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/31/01.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other: English translation of JP 09-143210, JP-11-171851, and JP 2000-063765.

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## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 25 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 48 of copending Application No. 09/907,080. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons. The difference between Claim 48 of copending Application No. 09/907,080 and Claim 25 of the present invention is the requirement of at least one acidic additive or of at least one basic additive. However, it is obvious to add the acidic additive or the basic additive because they can improve the kinetics of return to the light state of the resin derived from the composition as indicated in Claim 1 of copending Application No. 09/907,080.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### *Claim Objections*

3. Claims 1-45 are objected to because of the following informalities:

Applicants should remove all the unnecessary symbols such as “-“, “+”, etc. in the instant claims.

The instant claims are full of radicals and/or groups designated with the same symbol, but with inconsistent scopes. For example, there are at least three  $R_1$  groups in Claim 1, the scopes of them are not consistent. There are lots of other symbols (e.g., R, R', R'<sub>1</sub>, R<sub>3</sub>, n, etc.) throughout the instant claims have the same problem.

In Claim 1 (page 18, line 23), should “alkylene oxide radicals and” be deleted because “m” has nothing to do with the carbon number of alkylene oxide radicals, rather it determines the total carbon number of the polyalkylene oxide chain.

In Claim 1 (page 18, line 29), should “ester radicals and” be deleted because “n” has nothing to do with the carbon number of ester radicals, rather it determines the total carbon number of the polyester chain.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1 (page 18, line 24), "2" causes confusion because "m" is at least 2, and R comprises 2 to 5 carbon atoms.

In Claim 1 (page 18, line 30), "2" causes confusion because "n" is at least 2, and R comprises 2 to 5 carbon atoms.

In Claim 34, should "27" be -- 33 --?

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson (EP 471 972).

Anderson discloses a polymerizable composition for coating transportation vehicles (Example 16 and page 2, lines 3-6).

8. Claims 1-4, 27-29, 34-36 and 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujikake (JP 09-143210).

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Fujikake discloses an article prepared by using a polymerizable composition comprising a macromonomer represented by formula (2) ([0021]) and (poly)ethylene glycol (meth)acrylate ([0030]). The polymerizable composition can be used for preparing personal care tissue, electric cables, etc. ([0075]).

9. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Guo (Macromol. Chem. Phys. 199, 1175-1184 (1998)).

Guo discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (Materials and Figure 2). The resin can be used in a coating composition (Introduction).

10. Claims 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Olesen (Progress in Organic Coatings, 35, (1998), 161-170).

Olesen discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (Figure 1 and paragraph 2.3.).

11. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Komiya (JP 11-171851).

Komiya discloses a resin derived from a polymerizable composition comprising a macromonomer represented by formula (1) (claims 1 and 5 and [0007]-[0017]) and comonomers ([0028]-[0029]). Note that  $R^8$  can be H or methyl and  $R^7$  can be H (claim 5). The resin can be used for coating an article ([0031]).

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12. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hutter (US 5 691 405).

Hutter discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (col. 4, line 36 to col. 5, line 53 and Table I). The resin can be used as an ink printed on plastic film laminates (col. 9, lines 53-56).

13. Claims 40-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Swarup (US 5 237 090).

Swarup discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (col. 3, line 30 to col. 4, line 61).

14. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishikawa (JP 2000-063765).

Nishikawa discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers ([0008]-[0022] and [0038]-[0040]). The resin can be coated on an article (Examples).

15. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by D'Haese (US 5 380 779).



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D'Haese discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (Table II, Ex. 10). The resin can be used as a pressure sensitive adhesive on tapes (col. 1, lines 10-12).

16. Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Dai (Macromolecules, 33, (2000), 7021-7026).

Dai discloses a resin derived from a polymerizable composition comprising a macromonomer and comonomers (Figure 1 and Abstract). The resin can be used in a coating composition (Introduction).

17. Claims 5-24, 26, 30-33, 37-39 and 45 would be allowable if rewritten to overcome the claim objection and/or the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

None of the references mentioned above teaches or fairly suggests a) a difunctional monomer of formula (IV); b) the monomers set forth in Claim 12 and other similar claims reciting the same monomers; c) a photochromic colorant; or d) an ophthalmic article.

18. The "X" references cited in the international search report are not relied upon because of the following reasons:

JP 01-087606 does not teach or fairly suggest the use of the macromonomer represented by formula I in the present invention.

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WO 93 06184 has been applied by using its US equivalent (US 5 380 779).

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (703) 306-5550.

The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson, can be reached on (703) 308-2340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

klp  
September 12, 2003

  
Kuo-Liang Peng  
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